THAT WHICH IS CLAIMED IS:

1. Wideband speech encoding method in which the speech is sampled in such a way as to obtain successive voice frames each comprising a predetermined number of samples, and with each voice frame are determined parameters of a code-excited linear prediction model, these parameters comprising a long-term excitation digital word extracted from an adaptive coded directory as well as a short-term excitation word extracted from a fixed coded directory, characterized in that the extraction of the long-term excitation word is performed using a first perceptual weighting filter comprising a first formantic weighting filter (PWF1), in that the extraction of the short-term excitation word is performed using the first perceptual weighting filter (PWF1) cascaded with a second perceptual weighting filter comprising a second formantic weighting filter (PWF2), and in that the denominator of the transfer function of the first formantic weighting filter is equal to the numerator of the second formantic weighting filter.

2. Wideband speech encoding device comprising sampling means able to sample the speech in such a way as to obtain successive voice frames each comprising a predetermined number of samples, processing means able with each voice frame, to determine parameters of a code-excited linear prediction model, these processing means comprising first extraction means able to extract a long-term excitation digital word from an adaptive coded directory, and second extraction means able to extract

a short-term excitation word from a fixed coded directory, characterized in that the first extraction means (MEXT1) comprise a first perceptual weighting filter comprising a first formantic weighting filter (PWF1), in that the second extraction means (MEXT2) comprise the first perceptual weighting filter cascaded with a second perceptual weighting filter comprising a second formantic weighting filter (PWF2), and in that the denominator of the transfer function of the first formantic weighting filter is equal to the numerator of the second formantic weighting filter.

3. Terminal of a wireless communication system, characterized in that it incorporates a device according to Claim 2.

4. Terminal according to Claim 3, characterized in that it forms a cellular mobile telephone.